

Abstract

There are provided a process for producing a catalyst for α -olefin polymerization, which comprises the step of contacting (1) a solid catalyst component having Ti, Mg and a halogen as essential components, (2) an organoaluminum compound and (3) a compound having a -C-O-C-O-C- bond group in a closed ring structure with one another; and a process for producing an α -olefin polymer, which comprises the step of homopolymerizing or copolymerizing an α -olefin in the presence of a catalyst for α -olefin polymerization produced by the above process.